

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

XC FX

(Class of Station)

WL2XTX

(Call Sign)

0334-EX-CN-2021

(File Number)

NAME BAE Systems Land & Armaments L.P.

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(b) of the Commission's Rules

Station Locations

- (1) Fridley (ANOKA), MN - NL 45-03-29; WL 93-16-35
- (2) Fridley (ANOKA), MN - NL 45-03-29; WL 93-16-34
- (3) Fridley (ANOKA), MN - NL 45-03-31; WL 93-16-35
- (4) Fridley (ANOKA), MN - NL 45-03-31; WL 93-16-36
- (5) Fridley (ANOKA), MN - NL 45-03-31; WL 93-16-34
- (6) Fridley (ANOKA), MN - NL 45-03-30; WL 93-16-37

Frequency Information

Fridley (ANOKA), MN - NL 45-03-29; WL 93-16-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0W7D	33.5 pW (ERP)	
1575.42 MHz	FX	24M0W7D	33 pW (ERP)	
2.2-2.3 GHz	FX	5M00F1D	0.31 W (ERP)	

This authorization effective July 13, 2021 and
will expire 3:00 A.M. EST July 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Fridley (ANOKA), MN - NL 45-03-29; WL 93-16-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2.2-2.3 GHz	FX	5M00F1D	1.8 W (ERP)	0.00005 %

Fridley (ANOKA), MN - NL 45-03-29; WL 93-16-34

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1176 MHz	FX	24M0W7D	0.068 pW (ERP)	
1227.6 MHz	FX	24M0W7D	0.068 pW (ERP)	
1575.42 MHz	FX	24M0W7D	0.068 pW (ERP)	
2.2-2.3 GHz	FX	5M00F1D	0.31 W (ERP)	
2.2-2.3 GHz	FX	5M00F1D	1.8 W (ERP)	0.00005 %

Fridley (ANOKA), MN - NL 45-03-31; WL 93-16-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2.2-2.3 GHz	FX	5M00F1D	0.31 W (ERP)	

Frequency Information

Fridley (ANOKA), MN - NL 45-03-31; WL 93-16-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2.2-2.3 GHz	FX	5M00F1D	1.8 W (ERP)	0.00005 %

Fridley (ANOKA), MN - NL 45-03-31; WL 93-16-36

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0W7D	6.1 pW (ERP)	
1575.42 MHz	FX	24M0W7D	6.1 pW (ERP)	

Fridley (ANOKA), MN - NL 45-03-31; WL 93-16-34

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0W7D	54.3 pW (ERP)	
1575.42 MHz	FX	24M0W7D	54.3 pW (ERP)	

Fridley (ANOKA), MN - NL 45-03-30; WL 93-16-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0W7D	54.3 pW (ERP)	

Frequency Information

Fridley (ANOKA), MN - NL 45-03-30; WL 93-16-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1575.42 MHz	FX	24M0W7D	54.3 pW (ERP)	

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (4) GPS re-radiators are limited to a maximum EIRP value that will result in power levels not to exceed a power spectral density of -140 dBm/24 MHz measured at a distance of 100 ft from the building where the test is being conducted. Any malfunction, misalignment, or tampering of the equipment or its location which results in an increased power spectral density outside the building could cause harmful radio frequency interference to GPS receivers, including those in aircraft and/or ground based facilities.
- (5) GPS users in the area of potential interference to GPS reception must be notified that GPS information may be impacted for periods of time.
- (6) Licensee shall post signs on doors to the test area notifying that, "GPS re-radiator is in use and the GPS information you receive may be in error."
- (7) The test equipment shall only be used indoors and shall be under the control of the Company.
- (8) Operation is limited to activity for the purpose of testing radio navigation satellite service (RNSS) equipment and systems.
- (9) GPS re-radiators must operate in accordance with Section 8.3.28 of the NTIA Manual. Power spectral density of the signal should be very well controlled beyond the building.
- (10) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by Strategic Capabilities Office, Contract Number: W15QKN-18-9-1008, DOTC-17-01-INIT-1016; Strategic Capabilities Office, Contract Number: HQ0727-16-D-0002 HQ072720F1203 CET 20-047 and US Air Force Research Laboratories Strategic Development Planning & Experimentation Office, Contract Number: FA8650-20-C-9324. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.
- (11) Stop buzzers: Chris Beaudoin, Engineer at (612) 300-2827 and Phil Hefel at (763) 203-1135.

Special Conditions:

- (12) The frequencies are subject to prior coordination with FAA Headquarters 800 Independence Avenue, S.W., Washington, DC 20591.